



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,022	07/11/2003	Koichi Ando	065905-0303	2700
22428	7590	07/24/2007		
FOLEY AND LARDNER LLP			EXAMINER	
SUITE 500				SAFAIPOUR, HOUSHANG
3000 K STREET NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20007			2625	
			MAIL DATE	DELIVERY MODE
			07/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/617,022	ANDO, KOICHI	
	<b>Examiner</b> Houshang Safaipour	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 and 10-20 is/are rejected.
- 7) Claim(s) 9 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION*****Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 1,22(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishimaru et al. (US 7,13,091).

Regarding claim 1, Ishimaru discloses a method for scanning a document comprising a plurality of pages, comprising:

scanning a first page in the document at a first scanning speed, the first scanning speed being one of a color speed and a monochromatic speed (fig. 7, col. col. 6, line 36 through col. 7 line 23);

determining if the first page is color or monochrome based on a result of the scan of the first page (col. 5 line 66 through col. 6 line 4); and

rescanning the first page at a second scanning speed, the second scanning speed being the other of a color speed and a monochromatic speed, if the first speed is the monochromatic speed and the first page is determined to be color, or if the first speed is the color speed and the first page is determined to be monochrome (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 2, Ishimaru discloses a method according to claim 1, further comprising:

scanning a second page in the document at the first scanning speed; determining if the second page is color or monochrome based on a result of the scan of the second page; and rescanning the second page at the second scanning speed if the first speed is the monochromatic speed and the second page is determined to be color, or if the first speed is the color speed and the second page is determined to be monochrome (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 3, Ishimaru discloses the method according to claim 2, wherein the first scanning speed is the monochromatic speed and the second scanning speed is the color speed (col. 6, lines 44-53).

Regarding claim 4, Ishimaru discloses a method according to claim 1, further comprising scanning a second page in the document at the first scanning speed if the first page is not rescanned (fig. 7, S17, first type to S25); and

scanning the second page at the second scanning speed if the first page is rescanned (fig. 7, S17, second type to S25).

Regarding claim 5, Ishimaru discloses a method according to claim 4, further comprising: determining if the second page is color or monochrome based on a result of the scan of the second page (fig. 7, No at S25, starts the scanning of subsequent pages) ; and rescanning the second page if the scanning speed for the second page is the monochromatic speed and the second page is determined to be color, or if the scanning speed for the second page is the color speed and the second page is determined to be monochrome (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 6, Ishimaru discloses a method according to claim 4, further comprising: for each subsequent page of the document, scanning that subsequent page at the same scanning speed as the last scanning speed of the preceding page of the document (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 7, Ishimaru discloses a method according to claim 1, further comprising: initially scanning each subsequent page of the document at the first scanning speed if the first page is not rescanned; and initially scanning each subsequent page of the document at the second scanning speed if the first page is rescanned (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 8, Ishimaru discloses a method according to claim 7, wherein, for each subsequent page, that subsequent page is rescanned if the initial scanning speed for that subsequent page is the monochromatic speed and that subsequent page is determined to be color or if the initial scanning speed for that subsequent page is the color speed and that subsequent page is determined to be monochrome (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claim 10, Ishimaru discloses a method according to claim 1, wherein the monochromatic speed is faster than the color speed (col. 6, lines 44-55).

Regarding claim 11, Ishimaru discloses a method according to claim 1, further comprising:

detecting the scanned first page with a 4-line CCD sensor; and generating a read signal from the detection of the scanned first page (col. 5, lines 44-47).

Regarding claim 12, Ishimaru discloses a method for scanning a document comprising a plurality of pages, comprising:

scanning a first page in the document at a one of a color speed and a monochromatic speed; detecting the scanned first page with a 4-line CCD sensor having a monochromatic sensor, a red sensor, a green sensor and a blue sensor; and generating read signals from each of the sensors of the 4-line CCD sensor; determining if the first page is color or monochrome based on a result of the scanning; accepting only the read signal of the monochromatic sensor if the first page is determined to be monochrome; and accepting only the read signals of two or more of the red sensor, the green sensor and the blue sensor if the first page is determined to be color (figs. 4 and 7, col. 5 lines 44-47 and col. 6, line 36 through col. 7 line 23).

Regarding claim 13, Ishimaru does not explicitly address the resolution of the B/W and color sensors, however, he discloses that if monotone mode is selected the apparatus reads at a higher speed (col. 6, lines 44-53).

Regarding claim 14, Ishimaru discloses a system for scanning a document comprising a plurality of pages, the system comprising:

a light source that scans light a first page in the document at a first scanning speed, the first scanning speed being one of a color speed and a monochromatic speed;  
one or more mirrors that reflect the light scanned on the first page (fig. 1);  
a sensor that detects the light reflected by the one or more mirrors and generates image data of the first page from the detected light; and a detection circuit configured to determine if the first page is color or monochrome based on the image data of the first page, wherein the light source rescans the first page at a second scanning speed, the second scanning speed being the other of a color speed and a monochromatic speed, if the first speed is the monochromatic speed and the first page is determined to be color by the detection circuit, or if the first speed is the

color speed and the first page is determined to be monochrome by the detection circuit (fig. 7, col. 5, line 67 through col. 6 line 4 and col. col. 6, line 36 through col. 7 line 23).

Regarding claim 15, Ishimaru discloses a system according to claim 14, wherein the light source scans a second page in the document at the first scanning speed, the detection circuit being further configured to determine if the second page is color or monochrome based on a result of the scan of the second page, and wherein the light source rescans the second page at the second scanning speed if the first speed is the monochromatic speed and the second page is determined to be color by the detection circuit, or if the first speed is the color speed and the second page is determined to be monochrome by the detection circuit (fig. 7, col. col. 6, line 36 through col. 7 line 23).

Regarding claims 16-19, the arguments analogous to those presented for claims 3-6 are applicable to claims 16-19 respectively.

Regarding claim 20, Ishimaru discloses a system for scanning a document comprising a plurality of pages, the system comprising:

a light source that scans light a first page in the document at a first scanning speed, the first scanning speed being one of a color speed and a monochromatic speed; one or more mirrors that reflect the light scanned on the first page; a 4-line CCD sensor having a monochromatic sensor, a red sensor, a green sensor, and a blue sensor, which detect the light reflected by the one or more mirrors and generate monochromatic data, red data, green data, and blue data, respectively, of the first page from the detected light; and a detection circuit configured to determine if the first page is color or monochrome based on the monochromatic data, red data, green data, and blue data of the first page, wherein only the monochromatic data from the

Art Unit: 2625

monochromatic sensor is accepted if the detection circuit determines the first page to monochrome, and only at least two of the red data, green data, and blue data are accepted if the detection circuit determines the first page to be color (please refer to the discussions under claims 12 and 14).

***Allowable Subject Matter***

3. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipour whose telephone number is (571)272-7412. The examiner can normally be reached on Mon.-Fri. from 6:00am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Houshang Safaipour  
Patent Examiner  
July 12, 2007

A handwritten signature in black ink, appearing to read "Houshang Safaipour", is positioned above the typed name and title.